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CERTIFICATE OF FACSIMILE

I hereby certify that this correspondence for Application No. 10/699,288 is being facsimile transmitted to Technology Center 2800, fax number (571) 273-8300, on August 9, 2005.

David W. Dorton, Reg.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Serial No.:

10/699,288

Filed:

October 31, 2003

Group Art Unit:

2881

Examiner:

Johnnie L. Smith

Applicant;

James W. Schmitkons et al.

Title:

LAMP ASSEMBLY AND METHOD FOR CONVERTING

BETWEEN FLOOD AND FOCUS CONDITIONS

Attorney Docket:

NOR-1109

Confirmation No.: 2565

Cincinnati, Ohio 45202

August 9, 2005

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

SUBMISSION OF DECLARATION UNDER 37 C.F.R. § 1.132

Attached is a Declaration of James W. Schmitkons, filed in the abovereferenced application. Applicants do not believe that any fees are due in connection with this communication. However, if any fees are necessary, we hereby authorize Commissioner to charge any necessary fees to Deposit Account 23-3000.

Respectfully submitted,

WOOD, HERRON & EVANS, L.L.P.

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IN THE UNITED STATES PATENT OFFICE

APPLICATION OF SCHMITKONS ET AL.

SERIAL NUMBER 10/699,288

FILED: OCTOBER 31, 2003

TITLE: LAMP ASSEMBLY AND METHOD
OF CONVERTING BETWEEN FLOOD
AND FOCUS CONDITIONS

EXAMINER: JONNIE L. SMITH

DECLARATION UNDER 37 C.F.R. §1.132

I, JAMES W. SCHMITKONS, do hereby state and declare the following:

I am a co-inventor named in the above-identified patent application.

I am a Principal Engineer in the UV Group of Nordson Corporation of Westlake, Ohio (hereinafter, Nordson). Nordson is one of the world's leading producers of precision dispensing equipment for applying adhesives, sealants and coatings to a broad range of consumer and industrial products during manufacturing operations. Nordson offers a complete range of ultraviolet (UV) systems for curing and drying coatings and surface treatment of substrates.

I have been employed with Nordson since 1980, and have been in my current position since about 1998. Prior to working in the UV Group, I was involved with the research and development of various coating and dispensing systems. When Nordson became involved in UV curing and treatment systems, I was one of the principal research and development engineers assigned to that effort.

I have a B.S. in Mechanical Engineering from LeTourneau College in Longview, Texas, and an M.S. in Mechanical Engineering from the University of Wisconsin.

I hold about 18 U.S. patents related to coating and dispensing, and about 6 of these patents pertain to UV systems.

I have carefully studied and understand the Office Action dated March 10, 2005, issued in the above-identified patent application. I have also carefully studied the references cited in the Office Action, particularly U.S. Patent No. 6,457,846 to Cook et al., which was cited therein as a basis for rejecting claims in the application. Based on my education, knowledge, and experience in the field of UV lamp systems, I make the following comments.

In the field of UV systems, the terms "focus" and "flood" have certain, well-understood meanings. Specifically, a "focus" pattern of radiation emission from a UV lamp is one wherein all of the light reflected by the lamp converges at a single point or line, under the theoretical conditions of a point or line light source and perfectly formed reflectors. Such a system necessarily requires an elliptical reflector arrangement, and the point of convergence is called the "focal point." If a system does not include an elliptical arrangement of reflectors, the system cannot focus the emitted radiation.

In contrast to a focus pattern, a "flood" pattern of radiation emission is one in which not all of the reflected light converges at a single point, under the theoretical conditions of a point light source and perfectly formed reflectors. While each of the focus and flood patterns described above are theoretical, reference to systems as operating in a focus pattern of radiation emission or a flood pattern of radiation emission

refers to the design intent to either focus reflected light at a single point, or to spread out the reflected light, respectively.

FIGS. 3A-3C of U.S. Patent No, 6,457,846 to Cook et al. (Cook '846) depict the theoretical light ray traces of a lamp assembly. None of the light ray traces depicted in FIGS. 3A-3C, however, represent a focus pattern of radiation emission. Rather each of these figures depicts a flood pattern of radiation emission, as indicated by the scattered ray trace lines which do not converge at a single point. While the ray trace lines in FIGS. 3B and 3C appear to be spaced closer together in the areas directly beneath the lamp, compared to the ray trace lines in FIG. 3A, the more closely spaced lines of FIGS. 3B and 3C simply represent greater intensity of the reflected light and do not depict focused radiation emission.

In my opinion, therefore, persons skilled in the art of UV systems would interpret FIGS. 3A-3C of Cook '846 as depicting greater intensity directly beneath the lamp, and not as depicting focus patterns of radiation emission from the lamp. This opinion is supported by Cook '846 which states that "[i]t has been found that making the side elements adjustable and preferably rotatable, it is possible to vary the intensity of the UV output of the radiation source." (Cook '846 at col. 3, lines 58-61.) "The variation in peak output intensity which is possible with the lamp assembly 2 is illustrated in FIGS. [3A, 3B and 3C]. The regions on the substrate 2 which receive the greatest amount of radiation is changed by adjusting the position of the side elements." (Cook '846 at col. 5, lines 53-57.)(apparent typographical error with reference to "FIGS. 4A, 4B and 4C" has been corrected.)

Moreover, the lamp assembly of Cook '846 does not utilize elliptical reflectors and therefore cannot have a focal point and cannot emit radiation in a focused pattern. Cook '846 at col. 3, lines 48-52, states that "[f]prmation of the reflector with at least three elements enables the cross-section of the reflective surface to be generally rectangular which is more economical than known elliptical or parabolic reflectors." "In comparison with known lamp assemblies having parabolic or elliptical reflective surfaces, the overall dimensions of the assembly are reduced so achieving the industry desideratum of small assembly size." (Cook '846 at col. 5, lines 59-63.) The reflectors of Cook '846 are therefore not elliptical reflectors and cannot operate to emit radiation in a focused pattern. For these additional reasons, Cook '846 does not teach or suggest a lamp assembly that can be converted to operate between focused patterns of radiation emission and flood patterns of radiation emission.

Further, Declarant sayeth naught.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with knowledge that willful false statements and the like, so made, are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the patent application or any patent issued thereon.

Respectfully submitted,

James W. Schmitkons